

1	ACA	ATC	AGC	COC	ATG	GCT	CCC	CTG	TGC	CCC	AGC	CCC	TGG	CTC	CCT	CTG	12
13	L	I	P	A	P	A	P	G	L	T	V	Q	L	L	L	S	28
49	TTG	ATC	CCG	GCC	CCT	GCT	CCA	GCC	CTC	ACT	GTG	CAA	CTG	CTG	CTG	TCA	96
29	L	L	L	L	M	P	V	H	P	Q	R	L	P	R	M	Q	44
97	CTG	CTG	CTT	CTG	ATG	GCT	CAT	CCC	CAG	AGG	TTG	CCC	CGG	ATG	CAG		144
45	E	D	S	P	L	G	G	G	S	S	G	E	D	D	P	L	60
145	GAG	GAT	TCC	CCC	TTG	GGA	GGA	GCC	TCT	TCT	GCG	GAA	GAT	GAC	CCA	CTG	192
61	G	E	E	D	L	P	S	E	E	D	S	P	R	E	E	D	76
193	GCC	GAG	GAG	GAT	CTG	CCC	AGT	GAA	GAG	GAT	TCA	CCC	AGA	GAG	GAG	GAT	240
77	P	P	G	E	E	D	L	P	G	E	E	D	L	P	G	E	92
241	CCA	CCC	GGA	GAG	GAG	GAT	CTA	CCT	GGA	GAG	GAG	GAT	CTA	CCT	GGA	GAG	288
93	E	D	L	P	E	V	K	F	K	S	E	E	E	G	S	L	108
289	GAG	GAT	CTA	CCT	GAA	GTT	AAG	CCT	AAA	TCA	GAA	GAA	GAG	GCC	TCC	CTG	336
109	K	L	E	D	L	P	T	V	E	A	P	G	D	P	Q	E	124
337	AAG	TTA	GAG	GAT	CTA	CCT	ACT	GTT	GAG	GCT	GAA	GAA	GAA	GAA	GAA	GAA	384
125	P	Q	N	N	A	H	R	D	K	E	G	D	D	O	S	H	140
385	CCC	CAG	AAT	AAT	GCC	CAC	AGG	GAC	AAA	GAA	GCG	GAT	GAC	CAG	AGT	CAT	432
141	W	R	Y	G	G	D	P	P	W	P	R	V	S	P	A	C	156
433	TGG	CGC	TAT	GGA	GCC	GAC	CCC	TGG	CCC	CGG	GTG	TCC	CCA	GCC	TGC		480
157	A	G	R	F	Q	S	P	V	D	I	R	P	Q	L	A	A	172
481	GCG	GCC	CGC	TTC	CAG	TCC	CCG	GTG	GAT	ATC	CGC	CCC	CAG	CTC	GCC	GCC	528
173	P	C	P	A	L	R	P	L	E	L	L	G	F	Q	L	P	188
529	TTC	TGC	CCG	GCC	CTG	CGC	CCC	CTG	GAA	CTC	CTG	GCC	TTC	CAG	CTC	CCG	576
189	P	L	P	E	L	R	L	R	N	N	G	H	S	V	Q	L	204
577	CCG	CTC	CCA	GAA	CTG	CGC	CTG	CGC	AAC	AAT	GCC	CAC	AGT	GTG	CAA	CTG	624
205	T	L	P	P	G	L	E	M	A	L	G	P	G	R	E	Y	220
625	ACC	CTG	CCT	CCT	GCG	CTA	GAG	ATG	GCT	CTG	GCT	CCC	GCG	CGG	GAG	TAC	672
221	R	A	L	Q	L	H	L	H	W	G	A	A	G	R	P	G	236
873	CGG	GCT	CTG	CAG	CTG	CAT	CTG	CAC	TGG	GCG	GCT	GCA	GCT	CGT	CGG	GCC	720
237	S	E	H	T	V	E	G	H	C	R	F	P	A	E	I	H	252
721	TCG	GAG	CAC	ACT	GTG	GAA	GCC	CAC	CGT	TTC	CCT	GCC	GAG	ATC	CAC	GTG	258
253	V	H	L	S	T	A	F	A	R	V	D	E	A	L	G	R	268
769	GTT	CAC	CTC	AGC	ACC	GCC	TTT	GCC	AGA	GTT	GAC	GAG	GCC	TTG	GCG	COC	816
269	P	G	G	L	A	V	L	A	A	F	L	E	E	G	P	E	284
817	CCG	GGA	GCC	CTG	GCC	GTG	TTG	GCC	GCC	TTT	CTG	GAG	GAG	GCC	CCG	GAA	864
285	E	N	S	A	Y	E	Q	L	L	S	R	L	E	E	I	A	300
865	GAA	AAC	AGT	GCC	TAT	GAG	CAG	TTG	CTG	TCT	CGC	TTG	GAA	GAA	ATC	GCT	912
301	K	E	G	S	E	T	Q	V	P	G	L	D	I	S	A	L	316
913	GAG	GAA	GCC	TCA	GAG	ACT	CAG	GTG	CCA	GGA	CTG	GAC	ATA	TCT	GCA	CTC	960
317	L	P	S	D	F	S	R	Y	F	Q	Y	E	G	S	L	T	332
961	CTG	CCC	TCT	GAC	TTC	AGC	COC	TAC	TTC	CAA	TAT	GAG	GCG	TCT	CTG	ACT	1008
333	T	P	P	C	A	Q	G	V	I	W	T	V	F	N	Q	T	348
1009	ACA	CCG	CCC	TGT	GCC	CAG	GCT	ATC	TGG	ACT	GTG	TTT	AAC	CAG	ACA		1056
349	V	M	L	S	A	K	Q	L	H	T	L	S	D	T	L	W	364
1057	GTG	ATG	CTG	AGT	GCT	AAG	CAG	CTC	CAC	ACC	CTC	TCT	GAC	ACC	CTG	TGG	1104
365	O	P	G	D	S	R	L	Q	L	N	F	R	A	T	Q	P	380
1105	GGA	CCT	GCT	GAC	TGT	CGG	CTA	CAG	CTG	AAC	TTC	CGA	GCG	ACG	CAG	CCT	1152
381	L	N	G	R	V	I	E	A	S	F	P	A	G	V	D	S	396
1153	TTG	AAT	GCG	CGA	GTG	ATT	GAG	GCC	TCC	TTC	CCT	GCT	GGA	GTG	GAC	AGC	1200
397	S	P	R	A	A	E	P	V	Q	L	N	S	C	L	A	A	412
1201	AGT	CCT	CGG	GCT	GCT	GAG	CCA	GTG	CAG	CTG	AAT	TCC	TGC	CTG	GCT	GCT	1248
413	G	D	I	L	A	L	V	F	G	L	L	F	A	V	T	S	428
1249	GCT	GAC	ATC	CTA	GCC	CTG	GTT	TTT	GCC	CTC	CTT	TTT	GCT	GTG	ACC	AGC	1296
429	V	A	F	L	V	Q	M	R	R	Q	H	R	R	G	T	K	444
1297	GTG	GCG	TTC	CTT	GTG	CAG	ATG	AGA	AGG	CAG	CAC	AGA	AGG	GGA	ACC	AAA	1344
445	G	G	V	S	Y	R	P	A	E	V	A	E	T	G	A	°	460
1345	GCG	GCT	GTG	AGC	TAC	COC	CCA	GCA	GAG	GTA	GCC	GAG	ACT	GGA	GCC	TAG	1392
1393	AGG	CTG	GAT	CTT	GGA	GAA	TGT	GAG	AAG	CCA	GCC	AGA	GCC	ATC	TGA	GCG	1440
1441	GGA	GCC	GCT	AAC	TGT	CCT	GTG	CTG	CTC	ATT	ATG	CCA	CTT	CCT	TTT	AAC	1488
1489	TGC	CAA	GAA	ATT	TTT	TAA	AAT	AAA	TAT	TAA	T						1522

FIG. 1

A B

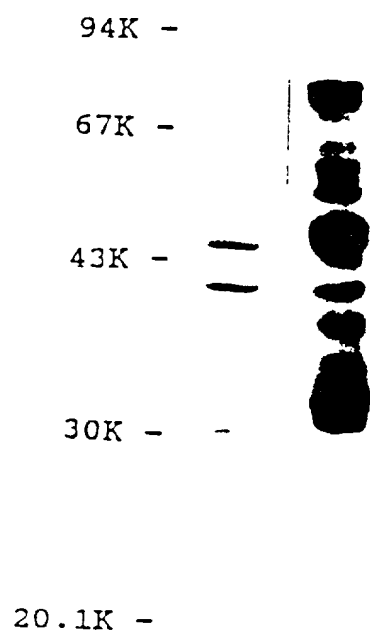


FIG. 2.

A B C D



FIG. 3.

100510-6122250

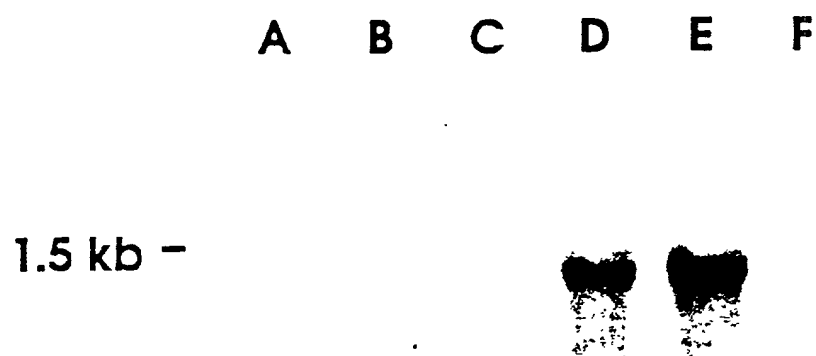
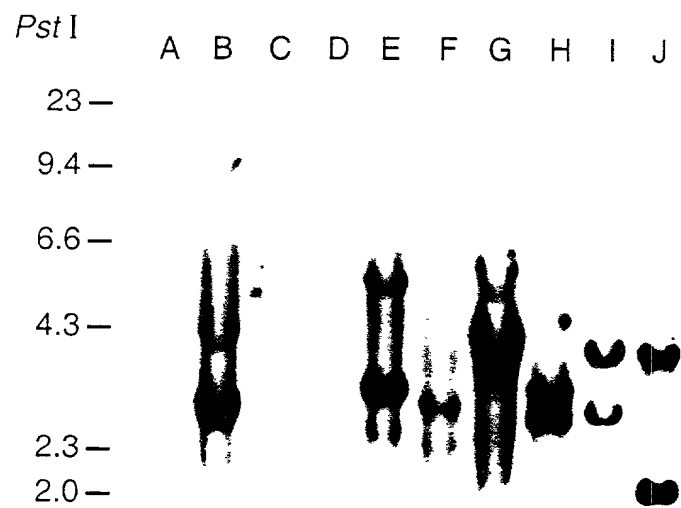


FIG. 4.

**FIG._5**

+

09772749-043004

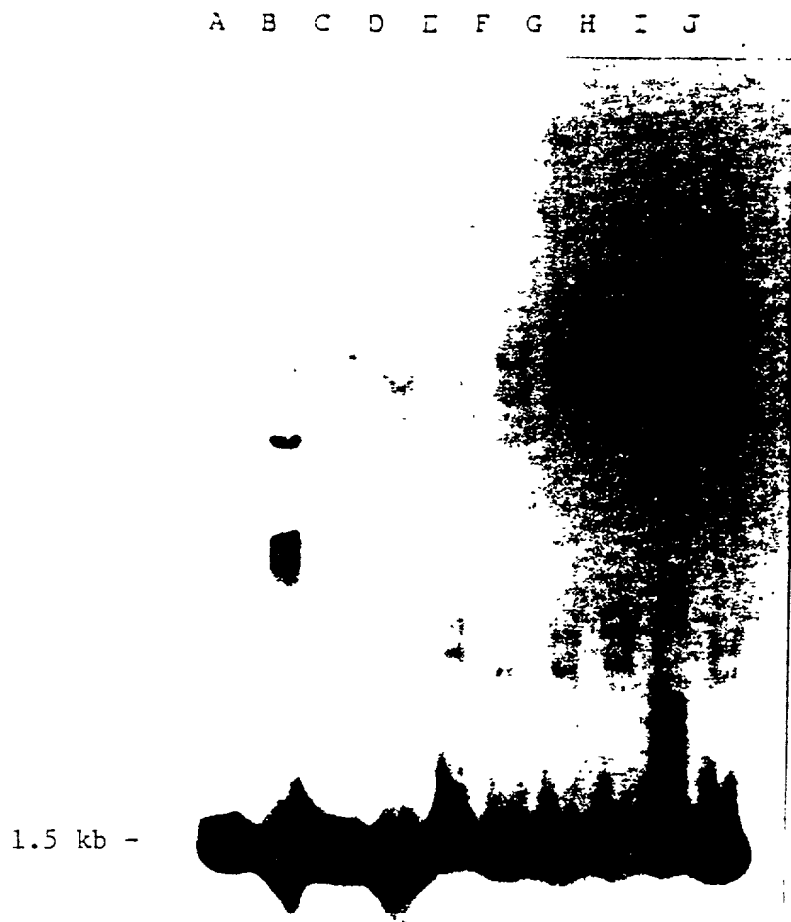


FIG. 5

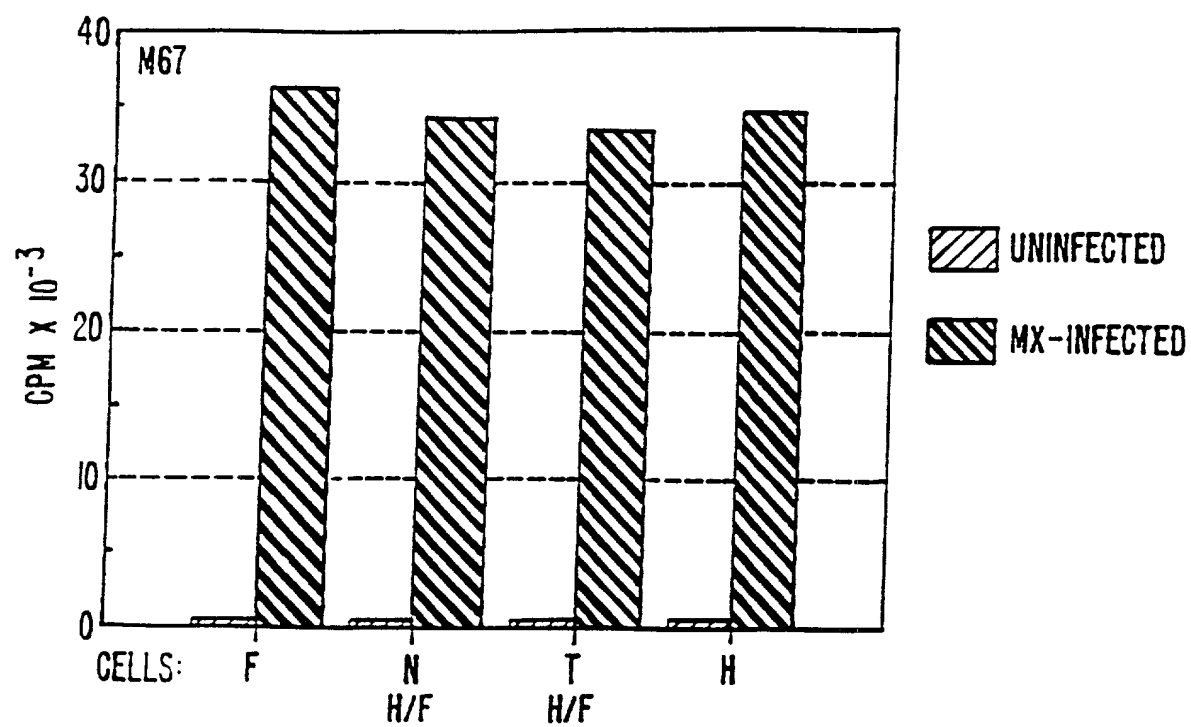


FIG. 6A.

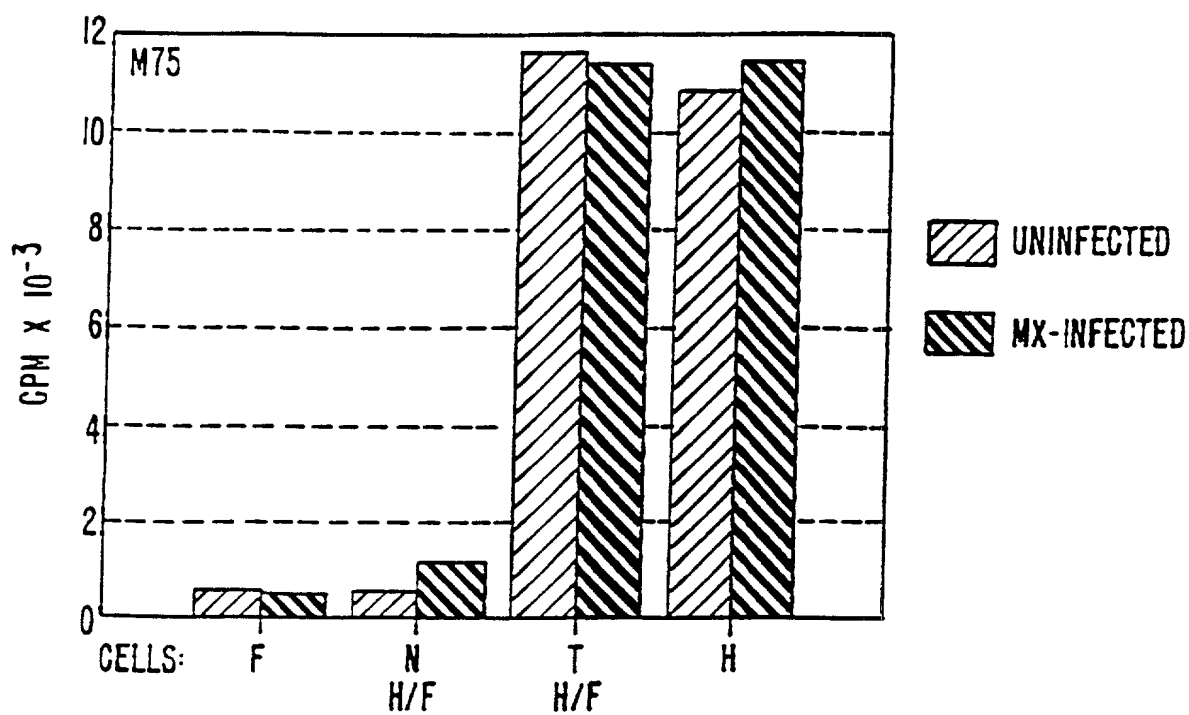


FIG. 6B.

0972749-013004

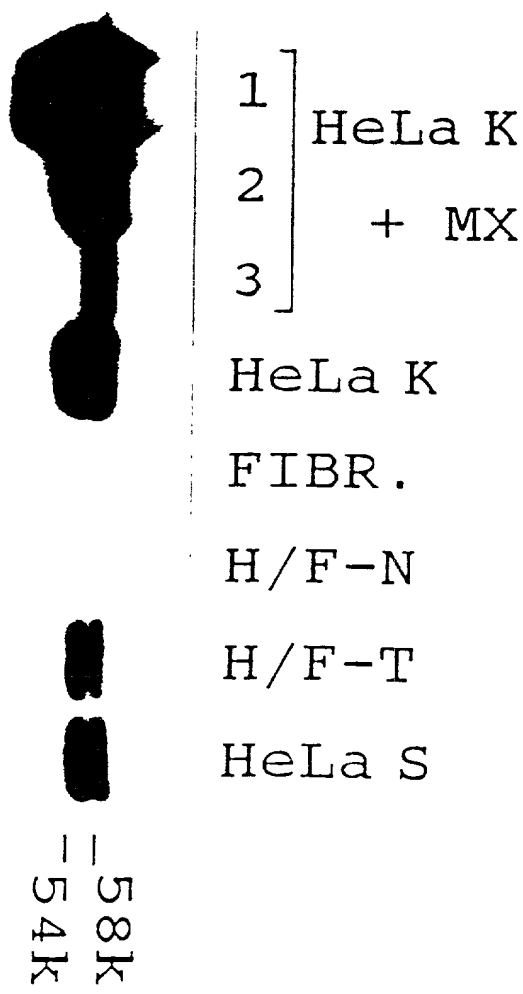


FIG. 7.

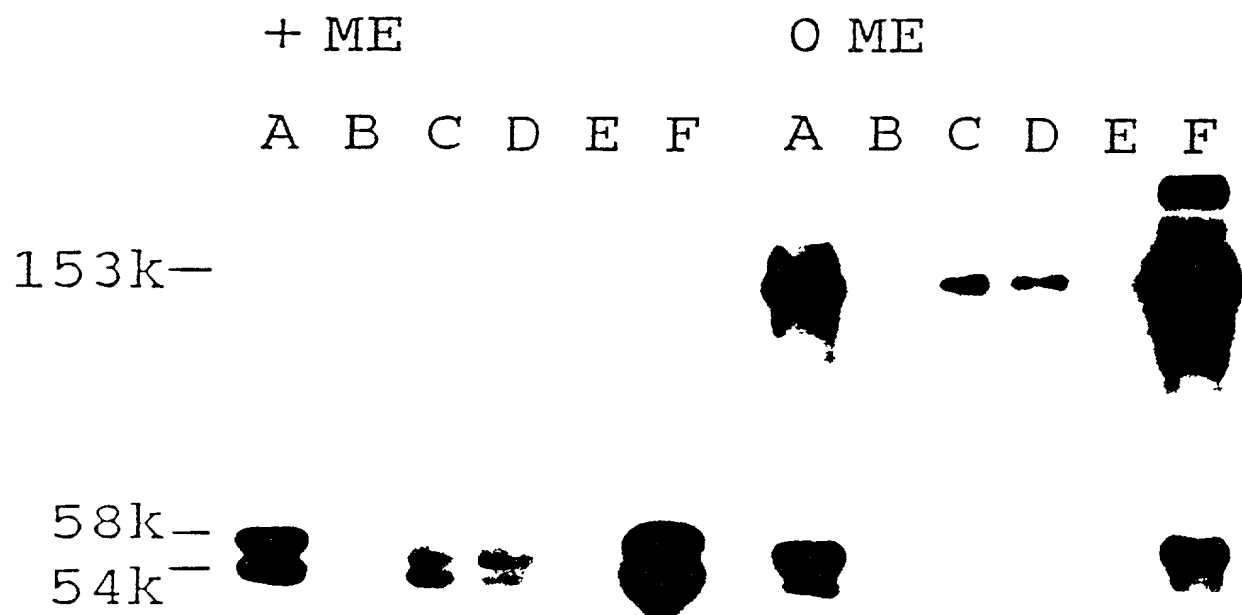


FIG. 8

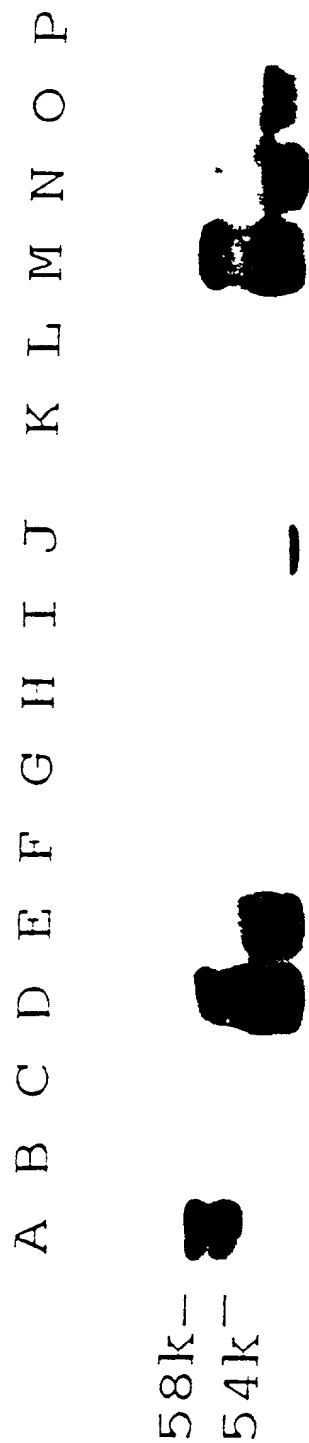


FIG. 9.

+ME OME

A B A B

153k-



58k-

54k-



FIG. 10.

09773949-04004
FOUO 672260

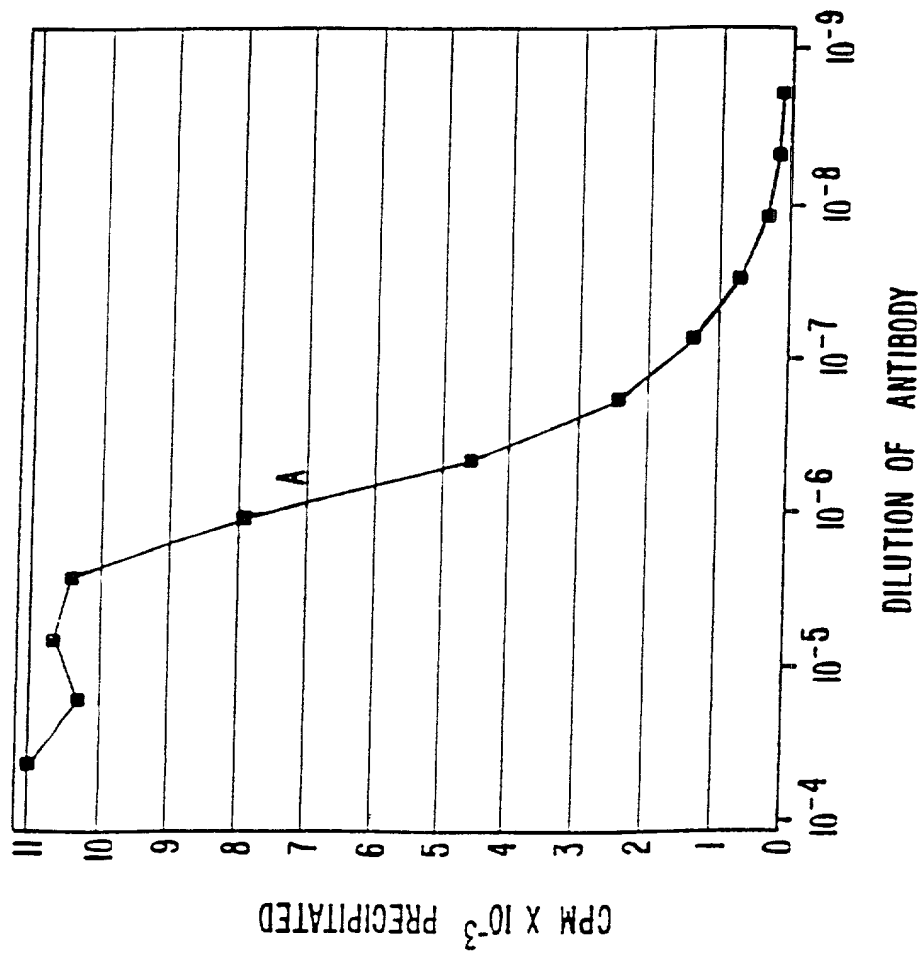


FIG. 11A.

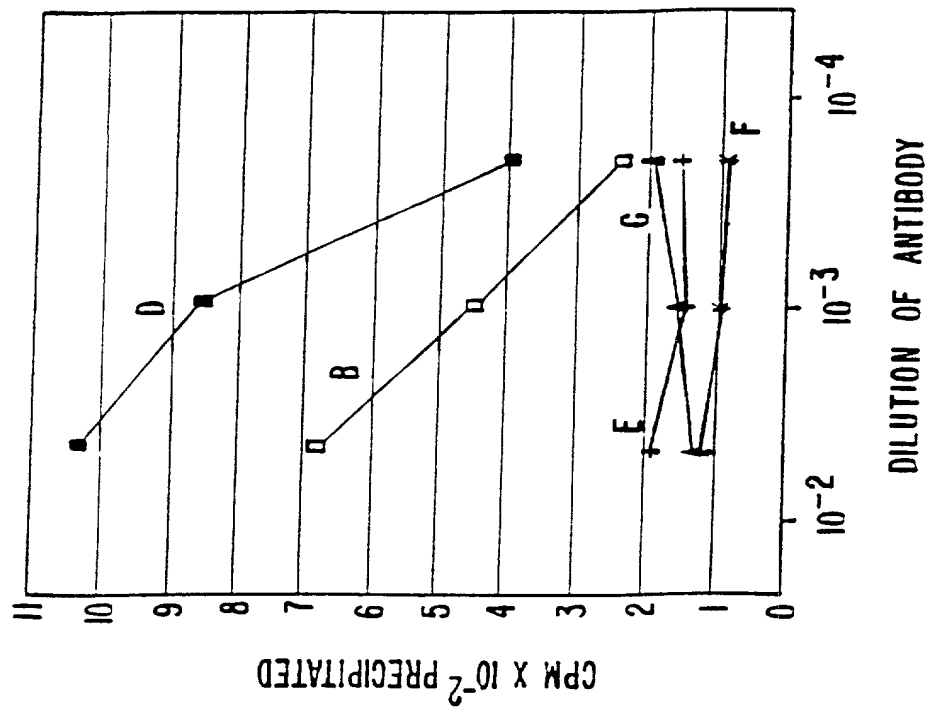


FIG. 11B.

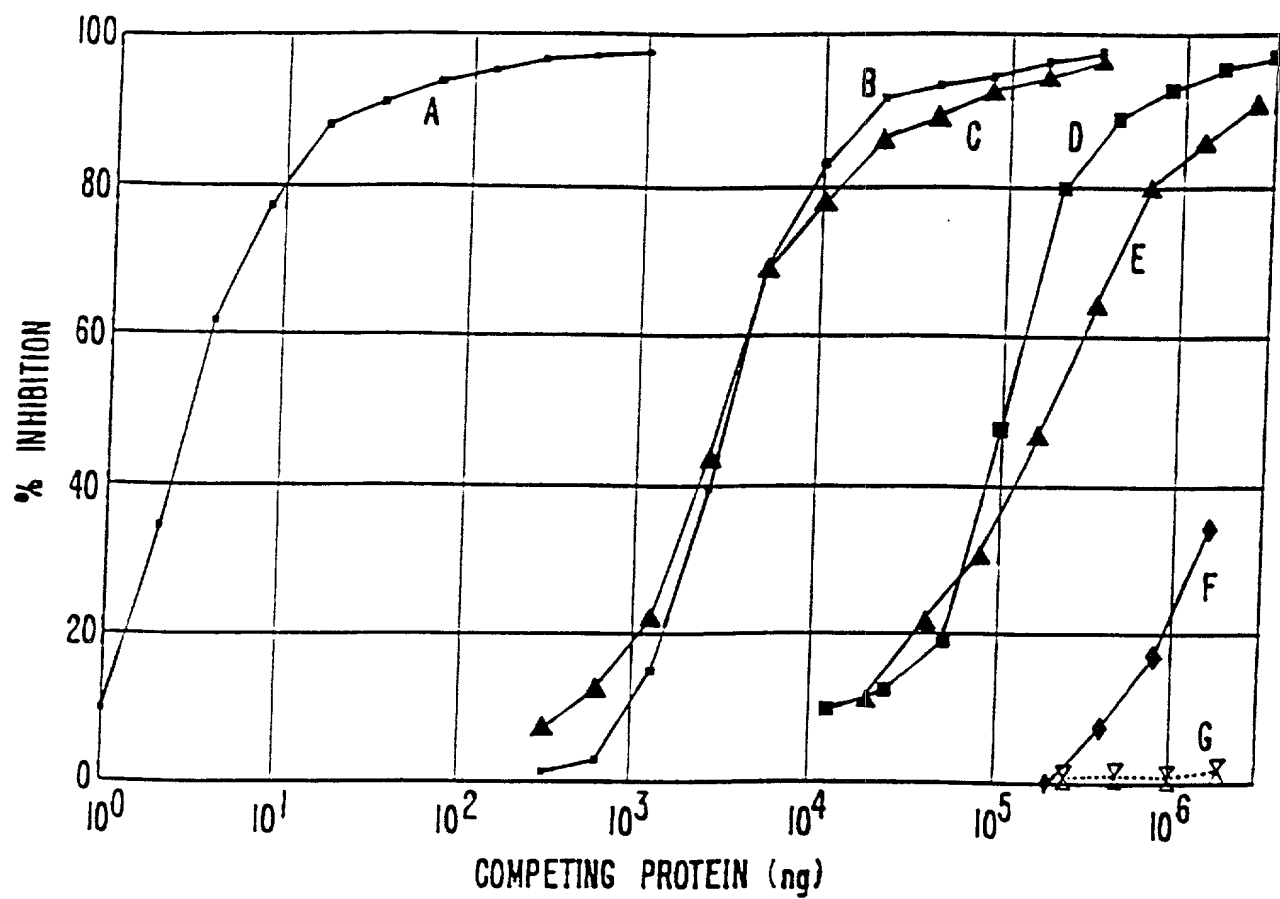


FIG. 12.

FOUO-672260



FIG. 13A.



FIG. 13B.



FIG. 13C.

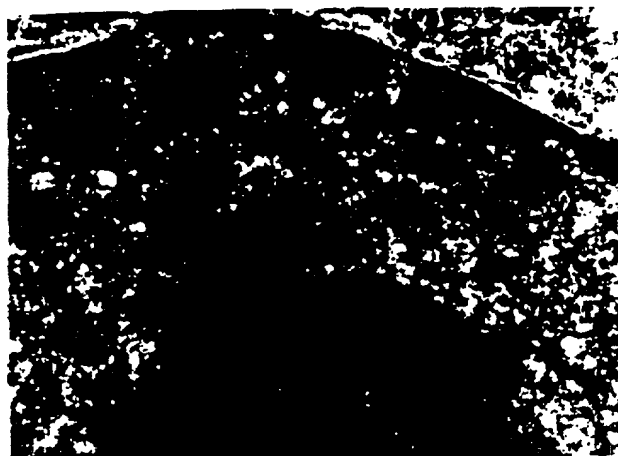


FIG. 13D.



FIG. 13E.

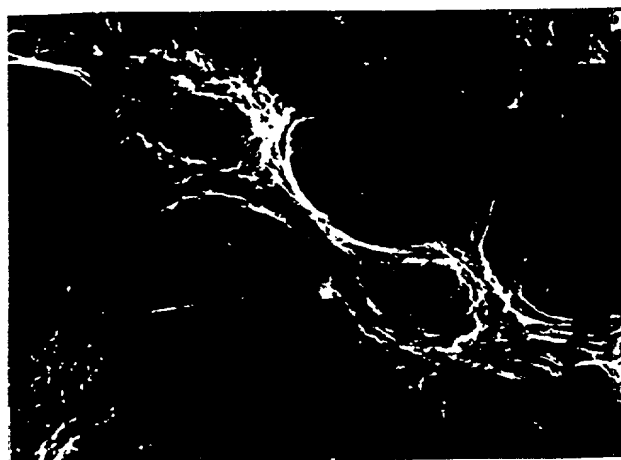


FIG. 13F.

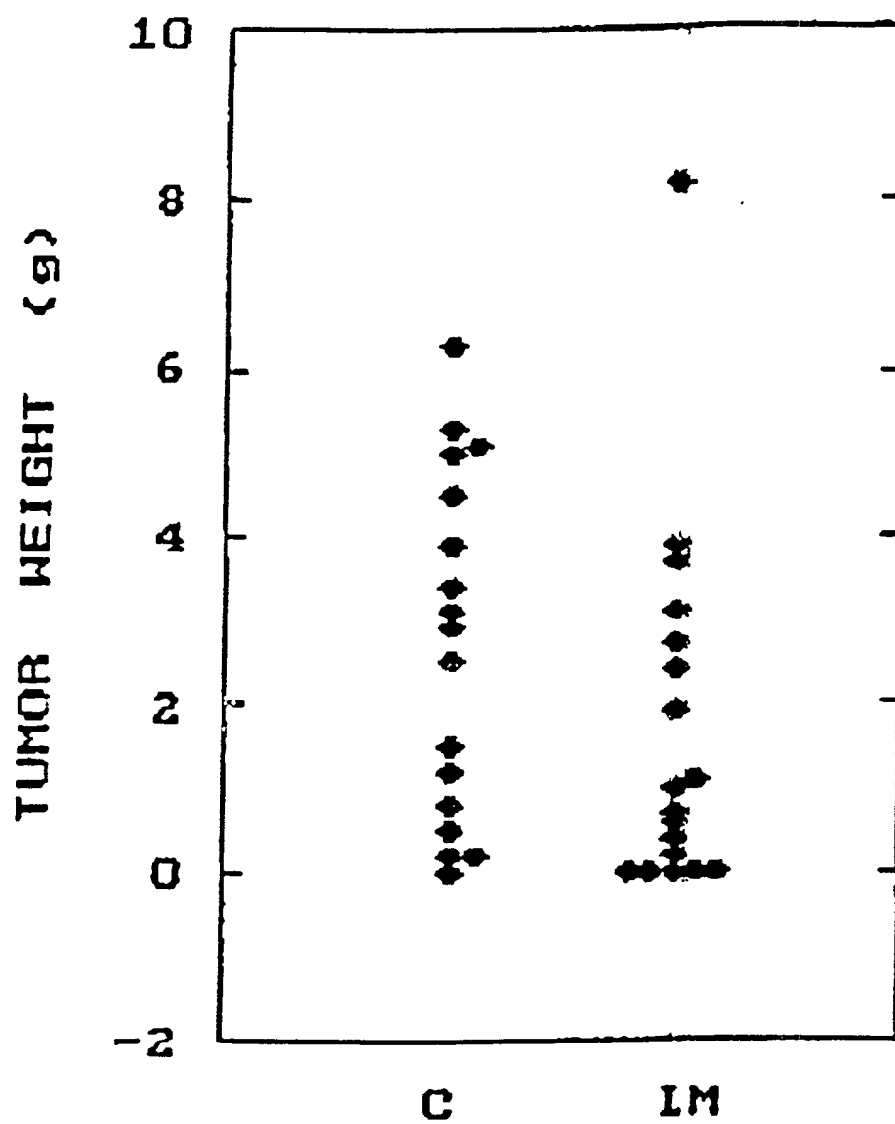


FIG. 14

1	ggatcctgtt	gactcgtgac	cttaccceca	accctgtgct	ctctgaaaca	tgagctgtgt
61	ccactcaggg	ttaaatggat	taagggcggt	gcaagatgtg	ctttgttaaa	cagatgcttg
121	aaggcagcat	gctcgttaag	agtcacacc	aatcccta	ctcaagtaat	cagggacaca
181	aacactgcgg	aaggccgcag	ggctcctctg	ctaggaaaac	cagagacctt	tggtcacttg
241	tttatctgac	cttccctcca	ctattgtcca	tgaccctgcc	aaatccccct	ctgtgagaaa
301	cacccaagaa	ttatcaataa	aaaaataaat	ttaaaaaaa	aatacaaaaa	aaaaaaaaaa
361	aaaaaaaaaa	gacttacgaa	tagttattga	taaatgaata	gctattggta	aagccaagta
421	aatgatcata	ttcaaaacca	gacggccatc	atcacagctc	aagtctacct	gatttgatct
481	ctttatcatt	gtcattcttt	ggattcacta	gatttagtcat	catcctcaaa	attctcccc
541	aagttctaat	tacgttccaa	acatttaggg	gttacatgaa	gcttgaacct	actaccttct
601	ttgcttttga	gccatgagtt	gtaggaatga	tgagtttaca	ccttacatgc	tgaggattaa
661	tttaaacttt	acctctaagt	cagttgggta	gcctttggct	tatttttcta	gctaattttg
721	tagttaatgg	atgcactgtg	aatcttgcta	tgatagtctt	cctccacact	ttgccactag
781	gggtaggtag	gtactcagtt	ttcagtaatt	gcttacctaa	gaccctaagc	cctatttctc
841	ttgtactggc	ctttatctgt	aatatgggca	tatttaatac	aatataattt	ttggagtttt
901	tttgtttgtt	tgttttgttt	tttttttgag	acggagtctt	gcatctgtca	tgcccaggct
961	ggagtagcag	tggtgccatc	tcggctcact	gcaagctcca	cctcccaggt	tcacgccatt
1021	ttcctgcctc	agcctcccga	gtagctggga	ctacaggcgc	ccgccaccat	gcccggctaa
1081	ttttttgtat	ttttggtaga	gacgggggtt	caccgtgtta	gccagaatgg	tctcgatctc
1141	ctgacttcgt	gatccacccg	cctcggcctc	ccaaagtctt	gggattacag	gtgtgagcca
1201	ccgcacctgg	ccaatttttt	gagtccttta	aagtaaaaa	atgtcttgta	agctggtaac
1261	tatggtagat	ttcctttttt	taatgtgggt	ctgacgggtc	tataggttct	tttgagtttg
1321	gcatgcata	gctacttttt	gcagtccttt	cattacattt	ttctctcttc	atttgaagag
1381	catgttatat	cttttagctt	cacttggttt	aaaagggttt	ctcattagcc	taacacagt
1441	tcattgttgg	taccacttgg	atcataagt	gaaaaacagt	caagaaattg	cacagtaata
1501	cttgttttga	agaggggatga	ttcaggtgaa	tctgacacta	agaaactccc	ctacctgagg
1561	tctgagattc	ctctgacatt	gctgtatata	ggcttttctt	ttgacagcct	gtgactgcgg
1621	actatttttc	ttaagcaaga	tatgctaaag	ttttgtgagc	ctttttccag	agagaggtct
1681	catatctgca	tcaagtgaga	acataataat	tctgcatgtt	tccatatttc	aggaatgttt
1741	gcttgtgttt	tatgctttta	tatagacagg	gaaacttggt	cctcagtgtg	ccaaaagagg
1801	tggaagtgt	tattggatat	catcattggc	ccacgctttc	tgaccttgga	aacaattaag
1861	ggttcataat	ctcaattctg	tcagaattgg	tacaagaaat	agctgctatg	tttcttgaca
1921	ttccacttgg	taggaaataa	gaatgtgaaa	ctcttcagtt	ggtgtgtgtc	cct?gttttt
1981	ttgcaatttc	cttcttactg	tggttaaaaa	aagtatgatc	ttgctctgag	aggtgaggca
2041	ttcttaatac	tgatctttta	agatcaataa	tataatcctt	tcaaggatta	tgtctttatt
2101	ataataaaga	taatttgtct	ttacagaat	caataatata	atcccttaaa	ggatttatat
2161	tttgcctggc	gcagtggttc	acacctgtaa	tcacagcact	ttgggtggcc	aaggtggaag
2221	gatcaaattt	gcctacttct	atattatctt	ctaaagcaga	attcatctct	cttccctcaa
2281	tatgatgata	ttgacagggg	ttgccctcac	tcactagatt	gtgagctcct	gctcagggca
2341	ggtagcgttt	tttgtttttg	tttttgtttt	tcttttttga	gacaggggtc	tgctctgtca
2401	cccaggccag	agtgcattgg	tacagtcctc	gctcactgca	gcctcaaccg	cctcgggtca
2461	aaccatcatc	ccatttcagc	ctcctgagta	gctgggacta	caggcacatg	ccattacacc
2521	tggctaattt	ttttgtattt	ctagttagaga	cagggtttgg	ccatgttgcc	cgggctgggt
2581	tcgaactcct	ggactcaagc	aatccaccca	cctcagcctc	ccaaaatgag	ggaccgtgtc
2641	ttattcattt	ccatgtccct	agtccatagc	ccagtgtctg	acctatggta	gtactaaata
2701	aatatttgtt	gaatgcaata	gtaaatagca	tttcagggag	caagaactag	attaacaaag
2761	gtggtaaaa	gtttggagaa	aaaaataata	gtttaatttg	gctagagtat	gagggagagt
2821	agtaggagac	aagatggaaa	ggtctcttgg	gcaaggtttt	gaaggaagtt	ggaagtcaga
2881	agtacacaat	gtgcatatcg	tggcaggcag	tggggagcca	atgaaggctt	ttgagcagga
2941	gagtaatgtg	ttgaaaaata	aatataggtt	aaacctatca	gagccctctc	gacacatata
3001	cttgcttttc	attcaagctc	aagtttgtct	cccacatacc	cattacttaa	ctcaccctcg

FIG. 15a

3061	ggctccccta	gcagcctgcc	ctacctcttt	acctgcttcc	tggtggagtc	agggatgtat
3121	acatgagctg	ctttccctct	cagccagagg	acatgggggg	ccccagctcc	cctgcctttc
3181	cccttctgtg	cctggagctg	ggaagcaggc	cagggttagc	tgaggctggc	tggcaagcag
3241	ctgggtggtg	ccagggagag	cctgcatagt	gccagggtgt	gccttggggt	ccaagctagt
3301	ccatggcccc	gataaccttc	tgctgtgca	cacacctgcc	cctcactcca	ccccatcct
3361	agcttttggt	tgggggagag	ggcacagggc	cagacaaacc	tgtgagactt	tggctccatc
3421	tctgcaaaag	ggcgctctgt	gagtcagcct	gctccccctc	aggcttgetc	ctccccacc
3481	cagctctcgt	ttccaatgca	cgtacagccc	gtacacaccg	tgtgctggga	caccccACAG
3541	TCAGCCGCAT	GGCTCCCCCTG	TGCCCCAGCC	CCTGGCTCCC	TCTGTTGATC	CCGGCCCCCTG
3601	CTCAGGCCT	CACTGTGCAA	CTGCTGCTGT	CACTGCTGCT	TCTGGTGCCT	GTCCATCCCC
3661	AGAGGTTGCC	CCGGATGCAG	GAGGATTCCC	CCTTGGGAGG	AGGCTCTTCT	GGGGAAGATG
3721	ACCCACTGGG	CGAGGAGGAT	CTGCCCAGTG	AAGAGGATTC	ACCCAGAGAG	GAGGATCCAC
3781	CCGGAGAGGA	GGATCTACCT	GGAGAGGAGG	ATCTACCTGG	AGAGGAGGAT	CTACCTGAAG
3841	TTAAGCCTAA	ATCAGAAGAA	GAGGGCTCCC	TGAAGTTAGA	GGATCTACCT	ACTGTTGAGG
3901	CTCCTGGAGA	TCCTCAAGAA	CCCCAGAATA	ATGCCACAG	GGACAAAGAA	Ggtaagtgt
3961	catcaatctc	caaatccagg	ttccaggagg	ttcatgactc	ccctcccata	ccccagccta
4021	ggctctgttc	actcagggaa	ggaggggaga	ctgtactccc	cacagaagcc	cttccagagg
4081	tcccatacca	atatccccat	ccccactctc	ggaggtagaa	agggacagat	gtggagagaa
4141	aataaaaagg	gtgcaaaagg	agagaggtga	gctggatgag	atgggagaga	agggggaggc
4201	tggagaagag	aaagggatga	gaactgcaga	tgagagaaaa	aatgtgcaga	cagaggaaaa
4261	aaataggtgg	agaaggagag	tcagagagtt	tgaggggaag	agaaaaggaa	agcttgggag
4321	gtgaagtggg	taccagagac	aagcaagaag	agctggtaga	agtcactctc	tcttaggcta
4381	caatgaggaa	ttgagaccta	ggaagaaggg	acacagcagg	tagagaaacg	tggcttcttg
4441	actcccaagc	caggaatttg	gggaaagggg	ttggagacca	tacaaggcag	agggatgagt
4501	ggggagaaga	aagaagggag	aaaggaaaga	tggtgtactc	actcatttgg	gactcaggac
4561	tgaagtggcc	actcactttt	tttttttttt	tttttgagac	aaactttcac	ttttgttgcc
4621	caggctggag	tgcaatggcg	cgatctcggc	tcactgcaac	ctccacctcc	cgggttcaag
4681	tgattctcct	gcctcagcct	ctagccaagt	agctgcgatt	acaggcatgc	gccaccacgc
4741	ccggctaatt	tttgtatttt	tagtagagac	ggggtttcgc	catgttgggt	aggctggctc
4801	cgaactcctg	atctcaggtg	atccaaccac	cctggcctcc	caaagtgtct	ggattatagg
4861	cgtgagccac	agcgcttggc	ctgaagcagc	cactcacttt	tacagacctt	aagacaatga
4921	ttgcaagctg	gtaggatttg	tgtttgggcc	accagctgc	ggtgttgagt	ttgggtgcgg
4981	tctcctgtgc	tttgcacctg	gcccgcctaa	ggcattttgt	accctgtaag	ctcctgtaag
5041	gcatctgcgt	ttgtgacatc	gttttggtcg	ccaggaaggg	attggggctc	taagcttgag
5101	cgggttcatcc	ttttcattta	tacagGGGAT	GACCAGAGTC	ATTGGCGCTA	TGGAGgtgag
5161	acacccaccc	gctgcacaga	cccaatctgg	gaacccagct	ctgtggarct	cccctacagc
5221	cgtccctgaa	cactggtccc	gggcgtccca	cccgcgcgcc	accgtcccac	cccctcacct
5281	tttctacccg	ggttccctaa	gttccctgacc	taggcgtcag	acttccctcac	tatactctcc
5341	caccccagGC	GACCCGCCCT	GGCCCCGGGT	GTCCCCAGCC	TGCGCGGGCC	GCTTCCAGTC
5401	CCCGGTGGAT	ATCCGCCCCC	AGCTCGCCGC	CTTCTGCCCG	GCCCTGCGCC	CCCTGGAAC
5461	CCTGGGCTTC	CAGCTCCCGC	CGCTCCCGA	ACTGCGCCTG	CGCAACAATG	GCCACAGTGg
5521	tgaggggggtc	tccccgcgga	gacttggggg	tggggcgggg	cgcaggggaag	ggaaccgtcg
5581	cgcagtgcct	gcccgggggt	tgggctggcc	ctaccggggc	gggcccggctc	acttgccctc
5641	ccctacgcag	TGCAACTGAC	CCTGCCTCCT	GGGCTAGAGA	TGGCTCTGGG	TCCCGGGCGG
5701	GAGTACCGGG	CTCTGCAGCT	GCATCTGCAC	TGGGGGGCTG	CAGGTCGTCC	GGGCTCGGAG
5761	CACACTGTGG	AAGGCCACCG	TTTCCCTGCC	GAGgtgagcg	cggactggcc	gagaagggggc
5821	aaaggagcgg	ggcggacggg	ggccagagac	gtggccctct	cctaccctcg	tgtccttttc
5881	agATCCACGT	GGTTCACCTC	AGCACCGCCT	TTGCCAGAGT	TGACGAGGCC	TTGGGGCGCC
5941	CGGGAGGCCT	GGCCGTGTTG	GCCGCCTTTC	TGGAGgtacc	agatcctgga	caccccttac
6001	tccccgcttt	cccatcccat	gctcctcccc	gactctatcg	tggagccaga	gaccccatcc
6061	cagcaagctc	actcaggccc	ctggctgaca	aactcattca	cgcactgttt	gttcatttaa
6121	cacccactgt	gaaccaggca	ccagccccca	acaaggattc	tgaagctgta	ggtccttgcc
6181	tctaaggagc	ccacagccag	tgggggaggc	tgacatgaca	gacacatagg	aaggacatag
6241	taaagatggt	ggtcacagag	gaggtgacac	ttaaagcctt	cactggtaga	aaagaaaagg

FIG. 15b

6301	aggtgttcat	tgcagaggaa	acagaatgtg	caaagactca	gaatatggcc	tatttaggga
6361	atggctacat	acaccatgat	tagaggaggc	ccagtaaagg	gaagggatgg	tgagatgcct
6421	gctaggttca	ctcactcact	tttattttatt	tattttatttt	tttgacagtc	tctctgtcgc
6481	ccaggctgga	gtgcagtggg	gtgatcttgg	gtcactgcaa	cttccgcctc	ccgggttcaa
6541	gggattctcc	tgcctcagct	tcctgagtag	ctgggggttac	aggtgtgtgc	caccatgccc
6601	agctaatttt	tttttgtatt	tttagtagac	agggtttcac	catgttggtc	aggctggctc
6661	caaactcctg	gcctcaagtg	atccgcctga	ctcagcctac	caaagtgtctg	attacaagtg
6721	tgagccaccg	tgcccagcca	cactcactga	ttctttaatg	ccagccacac	agcacaagt
6781	tcagagaaat	gcctccatca	tagcatgtca	atatgttcat	actcttaggt	tcatgatgtt
6841	cttaacatta	ggttcataag	caaaataaga	aaaaagaata	ataaataaaa	gaagtggcat
6901	gtcaggacct	cacctgaaaa	gccaaacaca	gaatcatgaa	ggtgaatgca	gaggtgacac
6961	caacacaaag	gtgtatatat	ggtttcctgt	ggggagtatg	tacggaggga	gcagtgagtg
7021	agactgcaaa	cgtcagaagg	gcacgggtca	ctgagagcct	agtatcctag	taaagtgggc
7081	tctctccctc	tctctccagc	ttgtcattga	aaaccagtc	accaagcttg	ttggttcgca
7141	cagcaagagt	acatagagtt	tgaaataata	cataggattt	taagagggag	acactgtctc
7201	taaaaaaaaa	aacaacagca	acaacaaaaa	gcaacaacca	ttacaatttt	atgttccctc
7261	agcatttctca	gagctgagga	atgggagagg	actatgggaa	cccccttcat	gttccggcct
7321	tcagccatgg	ccctggatac	atgcactcat	ctgtcttaca	atgtcattcc	cccagGAGGG
7381	CCCGGAAGAA	AACAGTGCCT	ATGAGCAGTT	GCTGTCTCGC	TTGGAAGAAA	TCGCTGAGGA
7441	AGgtcagttt	gttgggtctgg	ccactaatct	ctgtggccta	gttcataaag	aatcaccctt
7501	tggagcttca	ggtctgaggc	tggagatggg	ctccctccag	tgaggaggga	attgaagcat
7561	gagccagcgc	tcattcttgat	aataacctatg	aagctgacag	acacagttac	ccgcaaacgg
7621	ctgcctacag	attgaaaacc	aagcaaaaac	cgcggggcac	ggtggctcac	gcctgtaatc
7681	ccagcacttt	gggaggccaa	ggcaggtgga	tcacgaggtc	aagagatcaa	gaccattctg
7741	gccaacatgg	tgaaacccca	tctctactaa	aaatacgaaa	aaatagccag	gcgtgggtggc
7801	gggtgcctgt	aatcccagct	actcgggagg	ctgaggcgagg	agaatggcat	gaaccggga
7861	ggcagaagtt	gcagtgaagc	gagatcgtgc	cactgcactc	cagcctgggc	aacagagcga
7921	gactcttgct	tcaaaaaaaaa	aaaaaaaaaaaa	gaaaaccaag	caaaaacca	aatgagacaa
7981	aaaaaacaag	acaaaaaaat	ggtgttttga	aatttgtcaag	gtcaagtctg	gagagctaaa
8041	ctttttctga	gaactgttta	tctttaataa	gcatacaata	ttttaacttt	gtaaataactt
8101	ttgttggaag	tcgttctctt	cttagtcact	cttgggtcat	tttaaactct	acttactcta
8161	ctagaccttt	taggtttctg	ctagactagg	tagaactctg	cctttgcatt	tcttgtgtct
8221	gttttgtata	gttatcaata	ttcatattta	tttacaagtt	attcagatca	ttttttcttt
8281	tctttttttt	tttttttttt	ttttttacat	cttttagtaga	gacagggttt	caccatattg
8341	gccaggctgc	tctcaaaactc	ctgaccttgt	gatccaccag	cctcggcctc	ccaaagtgtc
8401	gggattcatt	ttttcttttt	aatttgcctc	gggcttaaac	ttgtggccca	gcactttatg
8461	atggtacaca	gagttaagag	tgtagactca	gacggtcttt	cttctttcct	tctcttcctt
8521	cctcccttcc	ctcccacctt	cccttctctc	cttcttttct	ttcttctctc	cttgccttct
8581	caggcctctt	ccagttgtct	caaagccctg	tacttttttt	tgagttaacg	tcttatggga
8641	agggcctgca	cttagtgaag	aagtggctct	agagttgagt	taccttgggt	tctgggaggt
8701	gaaactgtat	ccctataccc	tgaagcttta	aggggggtgca	atgtagatga	gaccccaaca
8761	tagatcctct	tcacagGCTC	AGAGACTCAG	GTCCCAGGAC	TGGACATATC	TGCATCCTG
8821	CCCTCTGACT	TCAGCCGCTA	CTTCCAATAT	GAGGGGTCTC	TGACTACACC	GCCCTGTGCC
8881	CAGGGTGTCA	TCTGGACTGT	GTTTAACCAG	ACAGTGATGC	TGAGTGCTAA	GCAGgtgggc
8941	ctgggggtgtg	tgtggacaca	gtgggtgcgg	gggaaagagg	atgtaagatg	agatgagaaa
9001	caggagaaga	aagaaatcaa	ggctgggctc	tgtggcttac	gcctataatc	ccaccacgtt
9061	gggaggctga	ggtgggagaa	tggtttgagc	ccaggagttc	aagacaaggc	ggggcaacat
9121	agtgtgaccc	catctctacc	aaaaaaaacc	caacaaaacc	aaaaatagcc	gggcatggtg
9181	gtatgcggcc	tagtcccagc	tactcaagga	ggetgaggtg	ggaagatcgc	ttgattccag
9241	gagtttgaga	ctgcagtga	ctatgatccc	accactgcct	accatcttta	ggatacatatt
9301	atttattttat	aaaagaaatc	aagaggctgg	atgggggaata	caggagctgg	aggggtggagc
9361	cctgaggtgc	tggttgtgag	ctggcctggg	acccttggtt	cctgtcatgc	catgaacca
9421	cccacactgt	ccactgacct	ccctagCTCC	ACACCCTCTC	TGACACCCTG	TGGGGACCTG
9481	GTGACTCTCG	GCTACAGCTG	AACTTCCGAG	CGACGCAGCC	TTTGAATGGG	CGAGTGATTG

FIG. 15c

9541	AGGCCTCCTT	CCCTGCTGGA	GTGGACAGCA	GTCCTCGGGC	TGCTGAGCCA	Ggtacagctt
9601	tgtctgggtt	ccccccagcc	agtagtccct	tatcctccca	tgtgtgtgcc	agtgtctgtc
9661	attggtgggtc	acagcccgcc	tctcacatct	cctttttctc	tccagTCCAG	CTGAATTCCT
9721	GCCTGGCTGC	TGgtgagtct	gccccctctc	ttgggtcctga	tgccaggaga	ctcctcagca
9781	ccattcagcc	ccagggtctg	tcaggaccgc	ctctgtctcc	tctccttttc	tgcagaacag
9841	accccaaccc	caatattaga	gaggcagatc	atgggtgggga	ttccccccatt	gtccccagag
9901	gctaattgat	tagaatgaag	cttgagaaat	ctcccagcat	ccctctcgca	aaagaatccc
9961	ccccctttt	tttaaagata	gggtctcact	ctgtttgccc	caggctgggg	tgttgtggca
10021	cgatcatagc	tcactgcagc	ctcgaactcc	taggctcagg	caatcctttc	accttagctt
10081	ctcaaagcac	tgggactgta	ggcatgagcc	actgtgcctg	gccccaaacg	gcccttttac
10141	ttggcttttta	ggaagcaaaa	acggtgctta	tcttaccctt	tctcgtgtat	ccaccctcat
10201	cccttggtctg	gcctcttctg	gagactgagg	cactatgggg	ctgcctgaga	actcggggca
10261	gggggtgggtg	agtgcactga	ggcagggtgt	gaggaactct	gcagaccctt	cttccttccc
10321	aaagcagccc	tctctgtctt	ccatcgagG	TGACATCCTA	GCCCTGGTTT	TTGGCCTCCT
10381	TTTTGCTGTC	ACCAGCGTCG	CGTTCCTTGT	GCAGATGAGA	AGGCAGCACA	Ggtattacac
10441	tgaccctttc	ttcaggcaca	agcttccccc	acccttgtgg	agtcacttca	tgcaaagcgc
10501	atgcaaatga	gctgctcctg	ggccagtttt	ctgattagcc	tttctgtttg	tgtacacaca
10561	gAAGGGGAAC	CAAAGGGGGT	GTGAGCTACC	GCCCAGCAGA	GGTAGCCGAG	ACTGGAGCCT
10621	AGAGGCTGGA	TCTTGAGAGAA	TGTGAGAAGC	CAGCCAGAGG	CATCTGAGGG	GGAGCCGGTA
10681	ACTGTCCTGT	CCTGCTCATT	ATGCCACTTC	CTTTTAACTG	CCAAGAAATT	TTTTTAAAATA
10741	AATATTTATA	ATaaaatattg	tgtttagtcac	ctttgttccc	caaatcagaa	ggaggtatatt
10801	gaatttccta	ttactgttat	tagcaccaat	ttagtggtaa	tgcatttatt	ctattacagt
10861	tcggcctcct	tccacacatc	actccaatgt	gttgctcc		

FIG. 15d

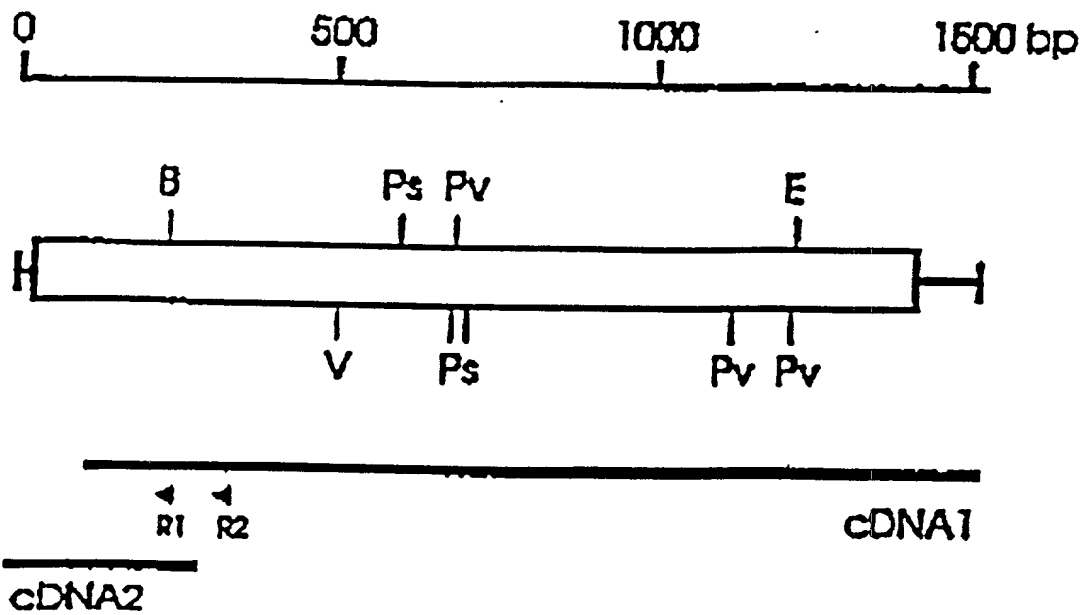


FIG. 16

FIG. 17

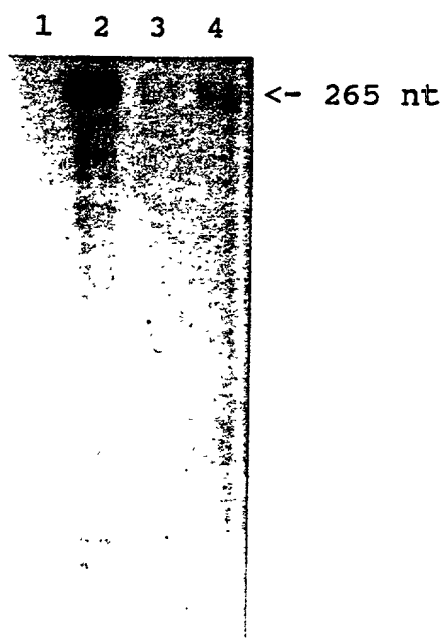


FIG 18a

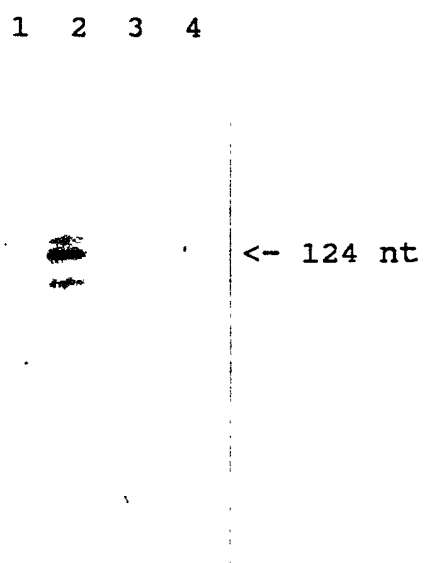


FIG. 18b

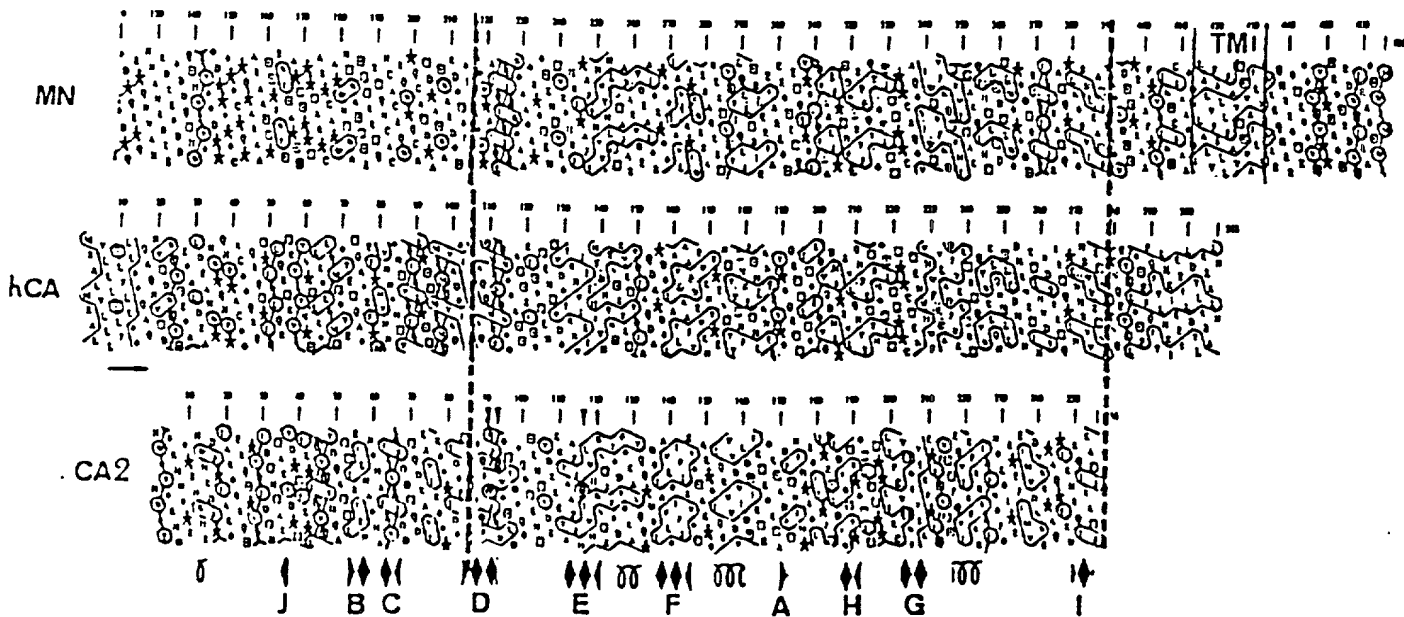


Fig. 19a

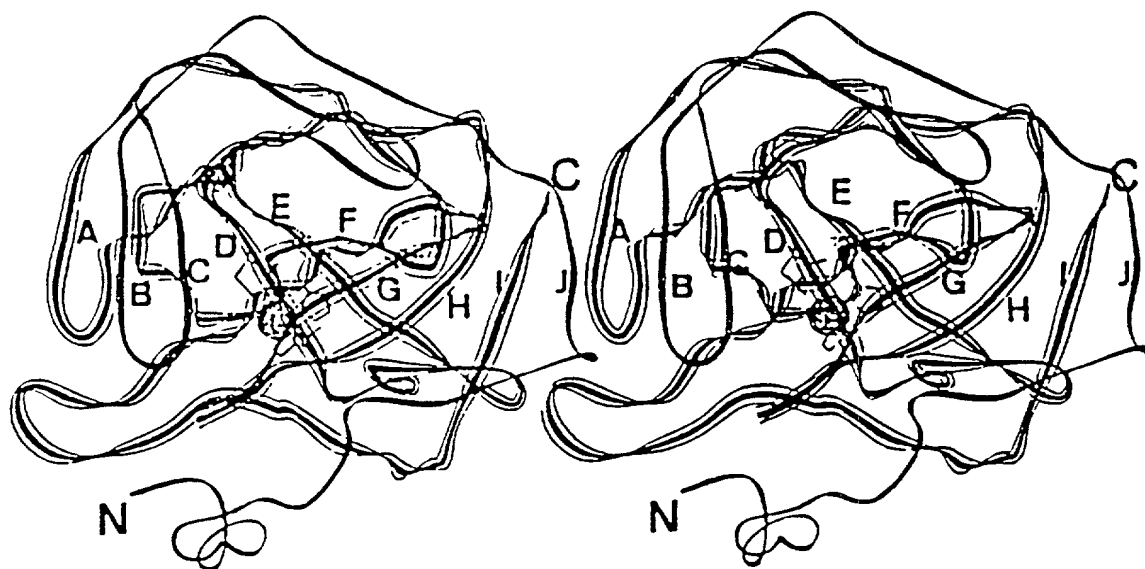


Fig. 19b

5' MN Genomic Region

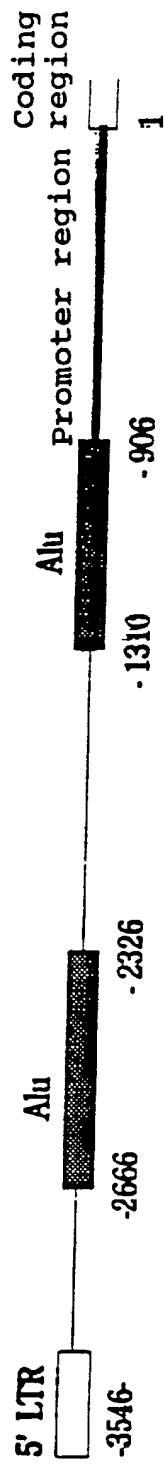


FIG. 20

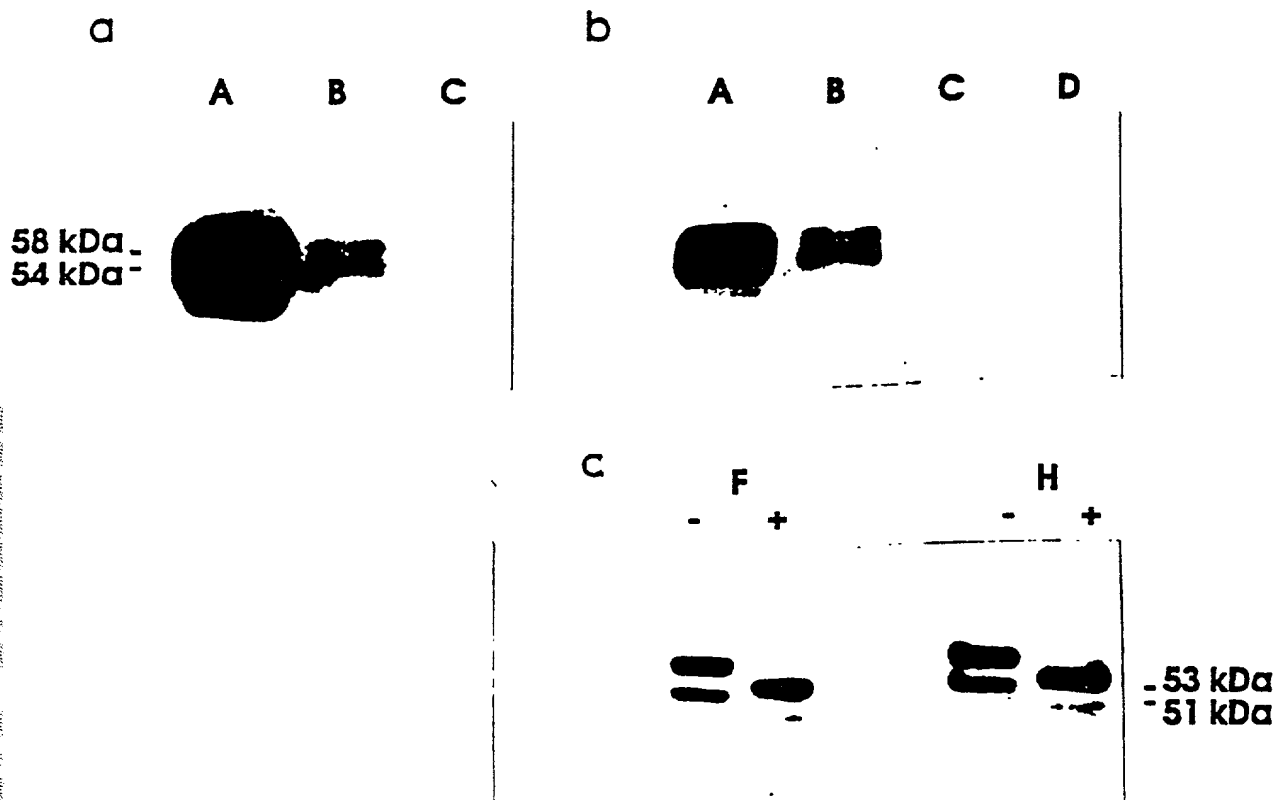


FIG. 21

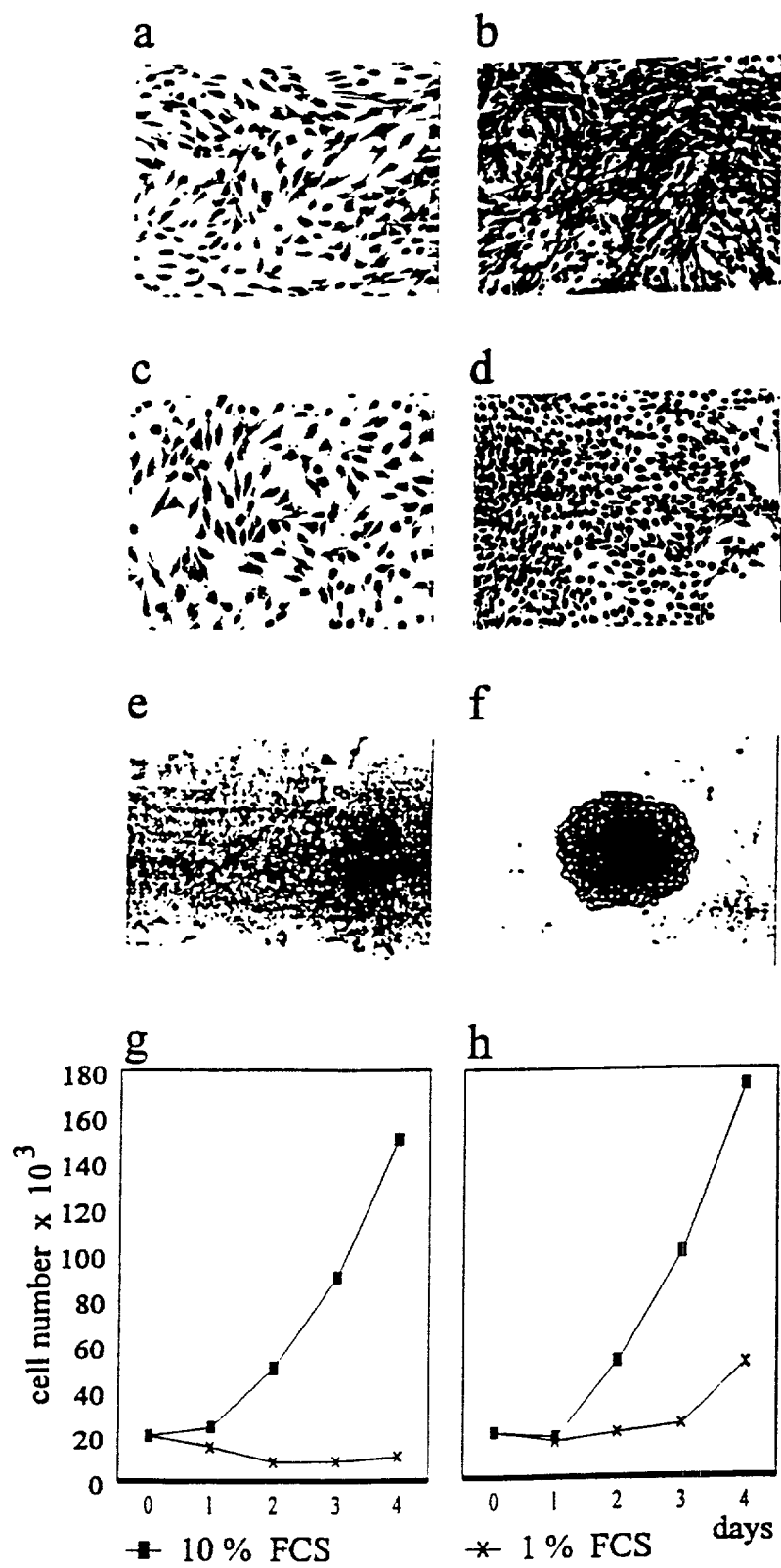


FIG. 22

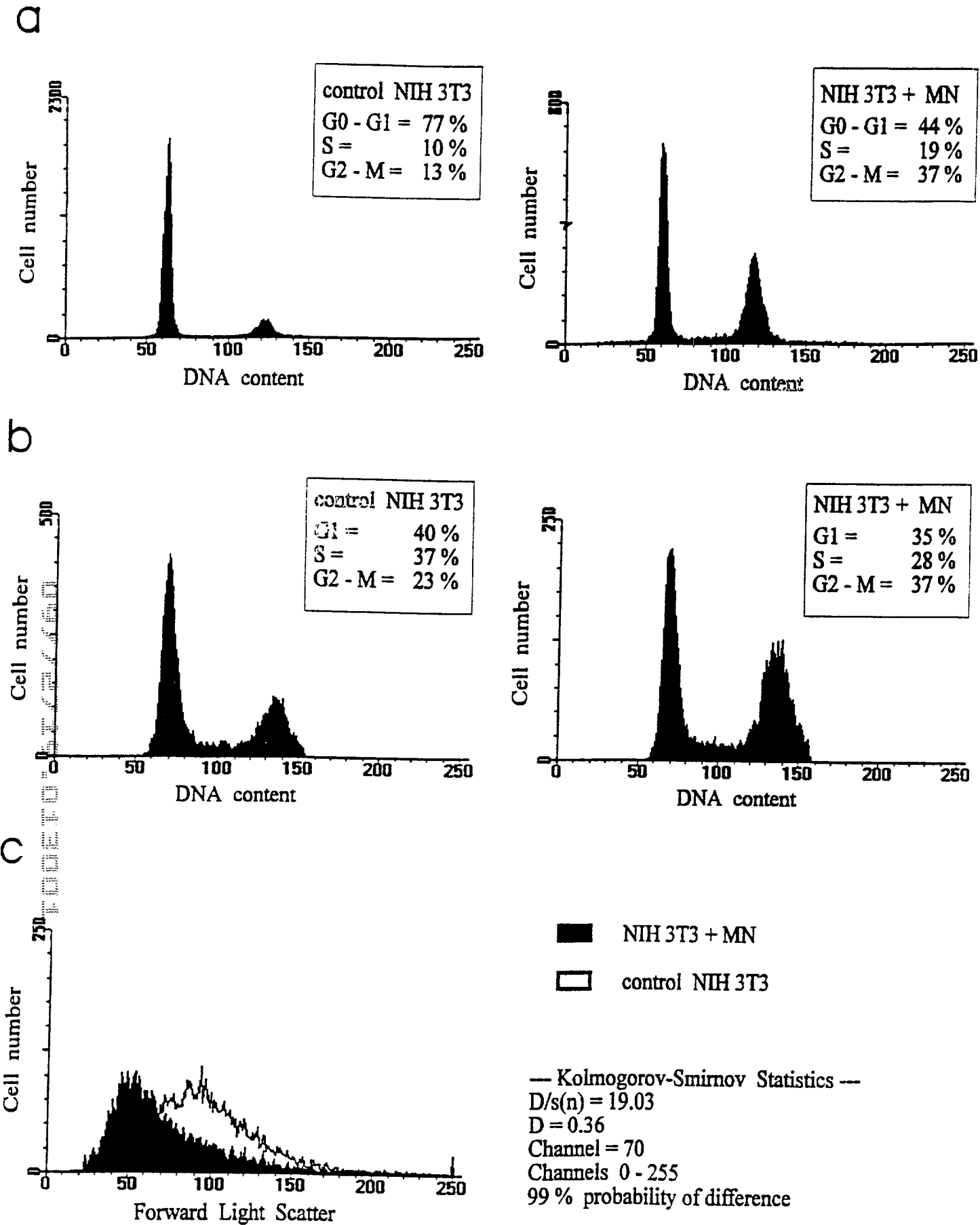


FIG. 23

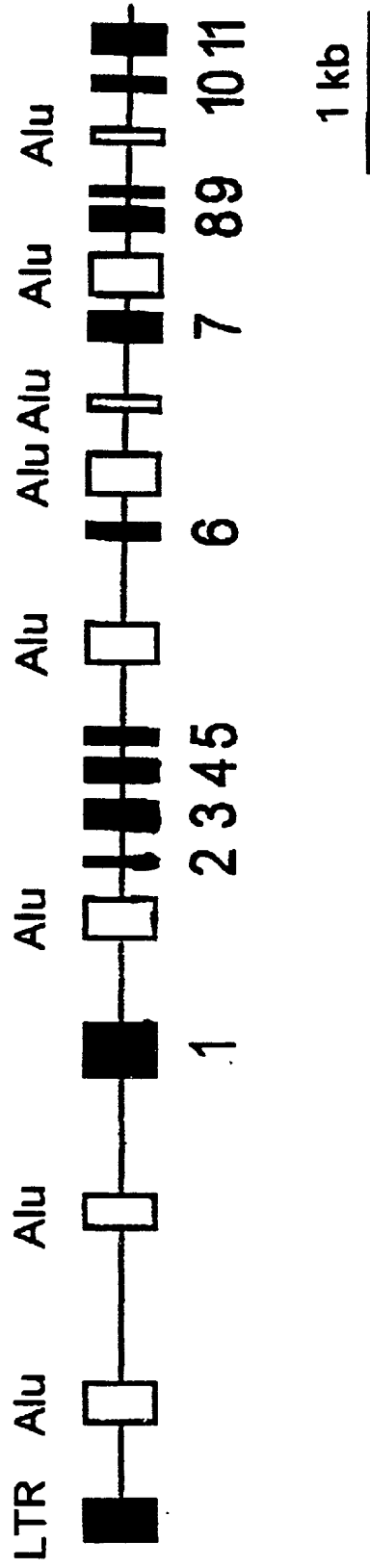


FIG. 24

-506 CTTGCTTTTC ATTCAAGCTC AAGTTTGTCT CCCACATACC CATTACTTAA CTCACCCCTCG

-446 GGCTCCCCTA GCAGCCTGCC CTACCTCTTT ACCTGCTTCC TGGTGGAGTC AGGGATGTAT
AP2 AP2

-386 ACATGAGCTG CTTTCCCTCT CAGCCAGAGG ACATGGGGGG CCCAGCTCC CCTGCCTTTC

-326 CCCTTCTGTG CCTGGAGCTG GGAAGCAGGC CAGGGTTAGC TGAGGCTGGC TGGCAAGCAG

-266 CTGGGTGGTG CCAGGGAGAG CCTGCATAGT GCCAGGTGGT GCCTTGGGTT CCAAGCTAGT
p53

-206 CCATGGCCCC GATAACCTTC TGCCTGTGCA CACACCTGCC CCTCACTCCA CCCCCATCCT
Inr

-146 AGCTTTGGTA TGGGGGAGAG GGCACAGGGC CAGACAAACC TGTGAGACTT TGGCTCCATC
Inr

-86 TCTGCAAAAG GCGGCTCTGT GAGTCAGCCT GCTCCCCTCC AGGCTTGCTC CTCCCCCACC
AP1 AP1 p53 AP2

-26 CAGCTCTCGT TTCCAATGCA CGTACAGCCC GTACACACCG TGTGCTGGGA CACCCACAG

FIG. 25

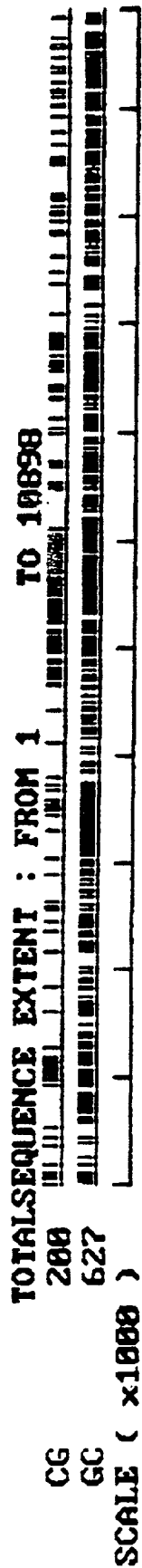


FIG. 26

A1a
A4 (EcoRI - NotI)
C45 (Hind III)

A2a
XE1 (XbaI - EcoRI)
XE3 (EcoRI - XbaI)

A4a
ES3 (EcoRI - SalI)
3 Pat (Pat I)
4 Pat (Pat I)
1 HI (Hind III)
2 HI (Hind III)
3 HI (Hind III)

A5c
C51 (Hind III)

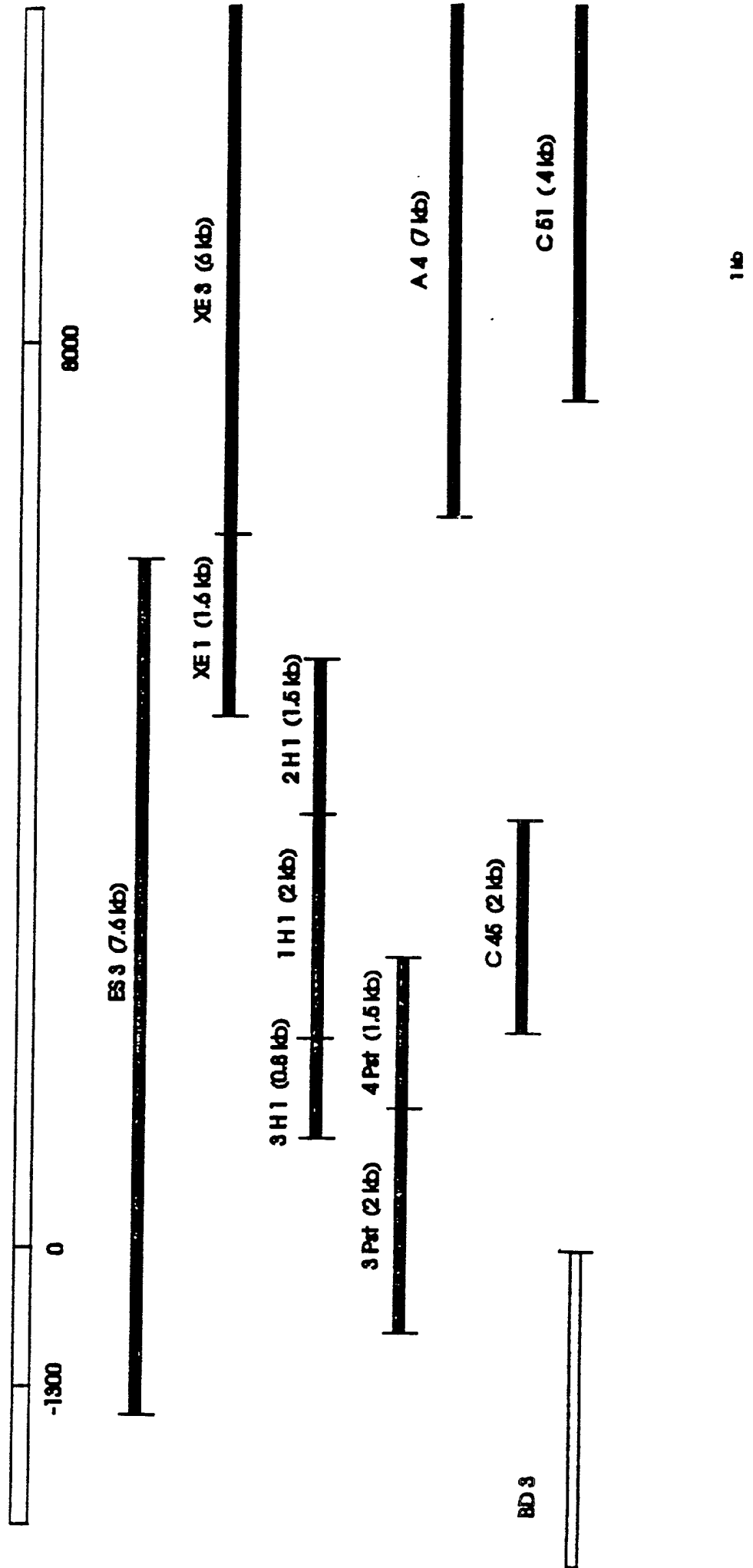


FIG. 27

CLONING OF MN-PROMOTER-CAT CONSTRUCTS

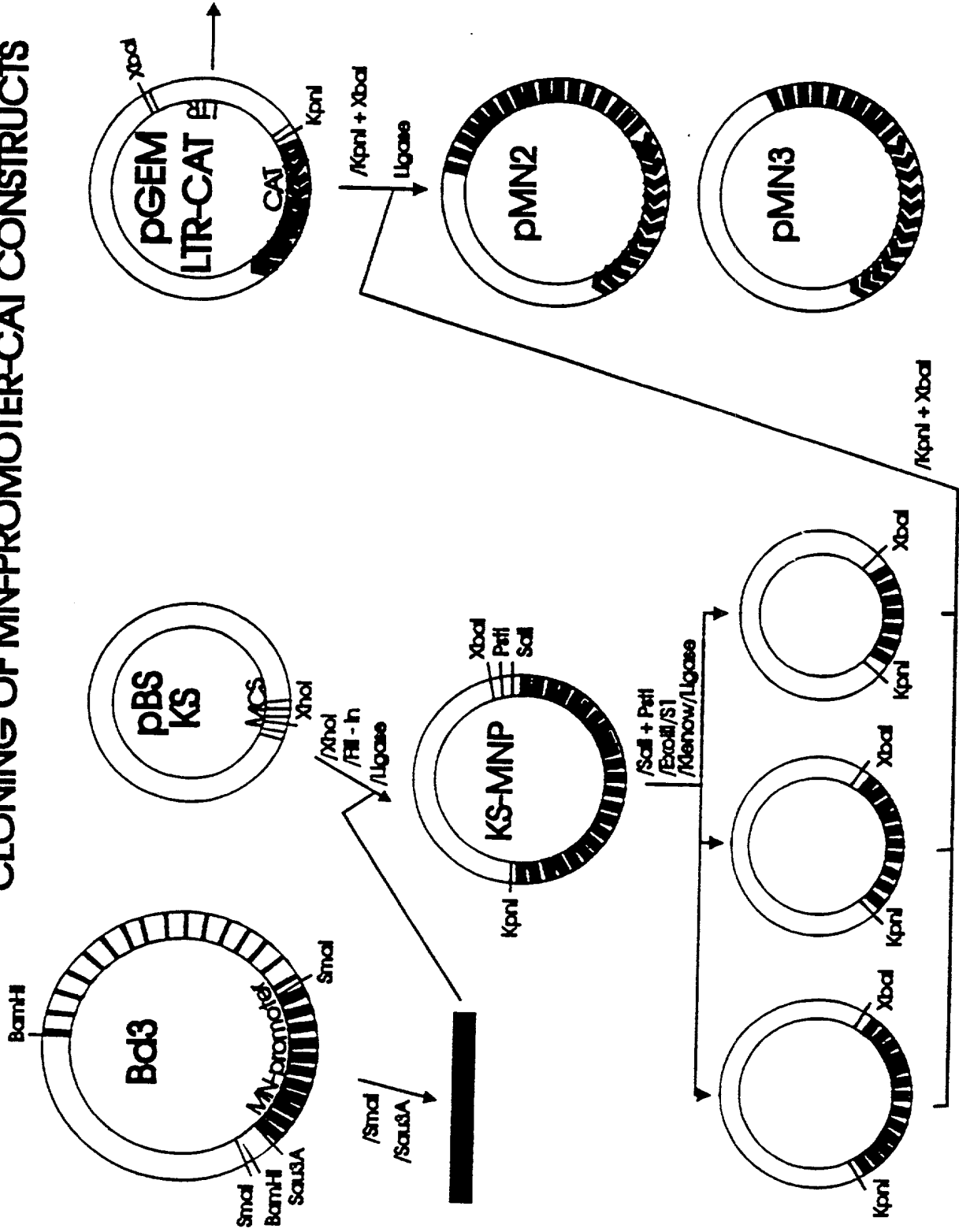


FIG. 28

STRUCTURE OF MN PROMOTER - CAT CONSTRUCTS

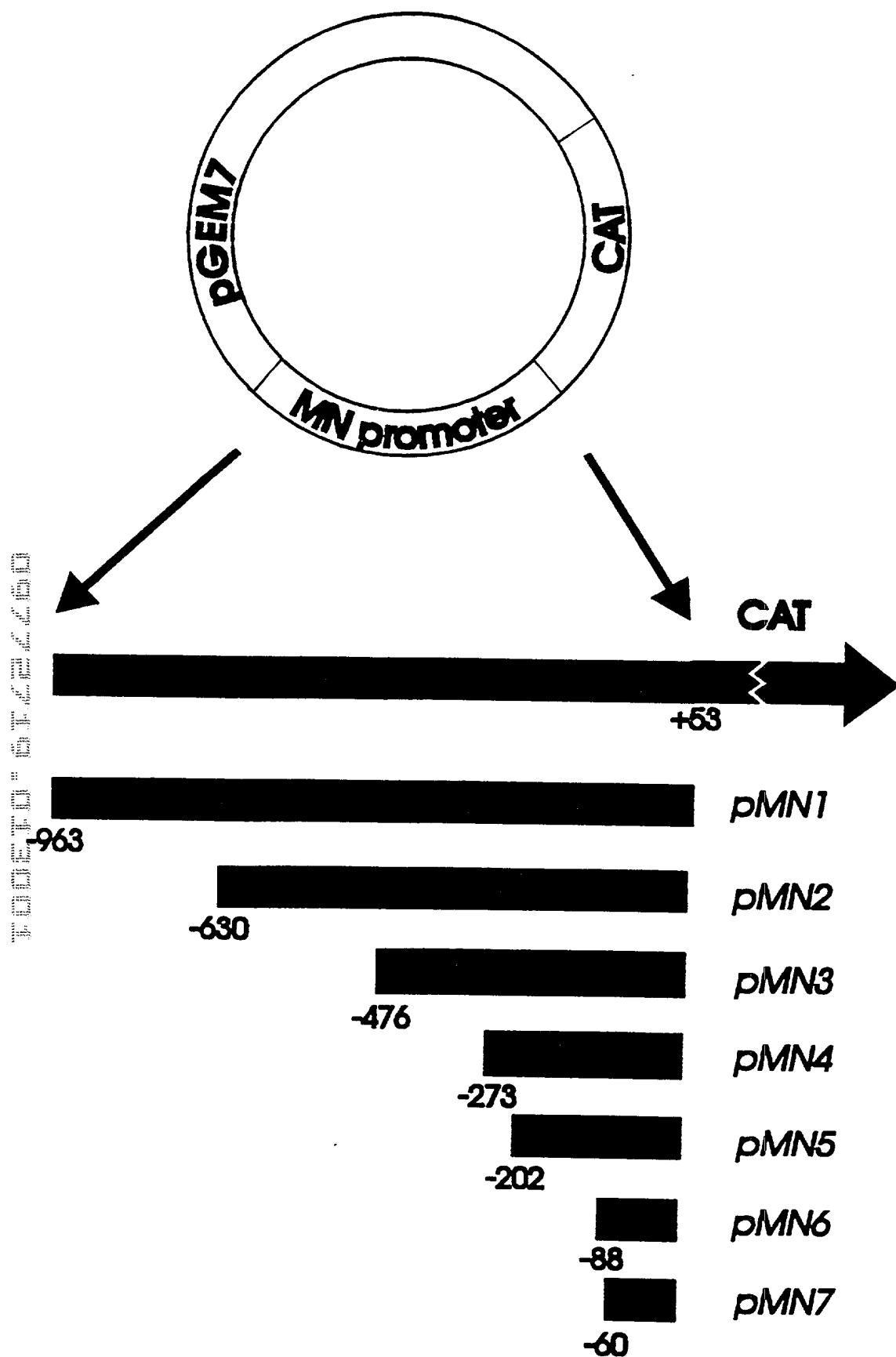


FIG. 29